Selfridge Field,
Building #1031,(FD Radar Program, FPS-26)(Radar Tower)
West of Doolittle Avenue between B and C Streets
Harrison-Township, Mt. Clemens Vicinity
Macomb County
Michigan

HAER No. MI-116-NN

HAER MICH 50-MTCLE.Y, INN-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
GREAT LAKES SYSTEMS OFFICE
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

HAER MICH 50-MTCLE, V, INN-

HISTORIC AMERICAN ENGINEERING RECORD

SELFRIDGE FIELD, HAER No. MI-116-NN BUILDING #1031,(F D RADAR PROGRAM FPS-26) (Radar Tower)

INTRODUCTION

Location:

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South of North Perimeter Road, east of North-South Ramp

Selfridge Air National Guard Base, Mt. Clemens vicinity,

Macomb County, Michigan

Quad/UTM:

U.S.G.S. New Haven Quadrangle, Universal Transverse

Mercator Coordinates: 17.349910.4720950

Date of Construction:

1962

Present Owner:

Air National Guard 3500 Fetchett Avenue

Andrews Air Force Base, Maryland, 20762

Present Occupant:

Vacant/Fire Department Support

Significance:

The North American Air Defense (NORAD) district occupies a distinct complex at Selfridge that was self contained and isolated from the rest of the base for functional and security reasons. It consists of utilitarian structures numbered in the #1000 series erected in the late 1950s and early 1960s.

Building #1031 is a utilitarian building whose role in providing state-of-the-art radar support was essential in the operation of the district. Building #1031 formed an integral part of the NORAD regional launch and interceptor center that protected the Great Lakes area during the Cold War. But the significance of the building is best defined as a contributing structure to the entire NORAD installation. As a regional command and control center for NORAD, responsible for protection of the Great Lakes region, the NORAD district was of exceptional importance in national defense strategy and is unique in Michigan. Except for the removal of the antenna and interior electronic equipment, it remains in a virtually unaltered state.

Historian:

William E. Rutter

Midwest Environmental Consultants, Inc.

May, 1996

II. HISTORY

This building, "FD Radar Program FPS 26," was designed for the U.S. Air Force by Wilcox, Erickson, Vogelbach, and Baumann of New York, for the New York District, Corps of Engineers, whose plans were modified and constructed at Selfridge in 1962.

III. DESCRIPTION

This building is a square plan, 45'11" by 45'11", four story tall structural steel and sheet metal structure. The ground or grade level and the platform or access floor above it are unsided and open to the elements, while the first and second floors are encased in galvanized corrugated metal insulated panels. The circumference of the roof is enframed in welded pipe hand rails on grated steel catwalks on outriggers extending beyond the plane of the building's elevations. This roof formed the base for the now-removed inflatable Radome. On the northwest corner of the building catwalk extended to a square platform for a communications antenna.

The steel beams and girts were welded together, while concrete was laid as

flooring on the first and second floors. Trap doors provided alternative access between the functional enclosed stories. Except for a pedestrian door on the second floor of the east elevation that accessed roof access ladder, the insulated steel panels comprising the sheathing of this building were pierced only by functionally positioned louvered heating and ventilating vents and fan hoods. The east elevation displays a hearing/ventilating louver, an exhaust fan hood void and a small wall louver, the south elevation a pair of heating/ventilating louvers and two exhaust fan hoods, the west elevation a heating/ventilating louver and an exhaust fan hood void, and the north elevation two sets of paired heating/ventilating louvers, two large heat exchanger louvers and a small wall vent.

Interior floors were poured reinforced concrete slabs with asbestos tile covering. Radar and support equipment on each floor was arranged in a triangle at the center of each floor. Access to the interior of this building was controlled by key punch code panels on the entry doors. The first floor displays an electrical panel along the south wall, with mechanical blowers near its northwest and southeast corners manufactured by Kinnard Wilson American Air Filter of Louisville, Kentucky. A bathroom was located on the landing between the floors. The second floor also features shielding for the most sensitive

equipment as well as an air lock and equipment hatch for the Radome above. A two-ton capacity monorail for radome movement was manufactured by the American Monorail Company. Doors on a steel enclosed room at the south wall is labeled "Radar Set AN/FPS-26A, Electronic and Ordinance Division, Avco Corporation, Evendale, Ohio" and "Danger RF Radiation and Antenna Rotation." Today the interior space of the second floor is divided into a maze of plywood sheathed frame construction used to train fire fighters in a lights-out environment.

IV. BIBLIOGRAPHY

A. BOOKS

Anonymous, <u>Guide and Directory</u>, <u>Selfridge Air Force Base</u>, Selfridge Air Force Base, Michigan, 1960.

, History of Selfridge Air Force Base, Michigan, unpublished ms., Air Force Historical Research Agency, Maxwell Air Force Base, Alabama, 1967.

Bright, Charles B. (ed.)

1992 <u>Historical Dictionary of the U.S. Air Force</u>. Greenwood Press, New York.

Great Lakes Research, <u>Historic American Engineering Record</u>, <u>HAER MI-80</u>, <u>Newport Nike Missile Battery D-57/58</u>. Great Lakes Research, Williamston, Michigan, 1994.

Nigro, Louis, Selfridge Air National Guard Base, An Unofficial History, unpublished ms., Public Information Office, Selfridge ANG Base, Michigan, 1977.

B. PLANS

Original construction plans, "FIRST AND SECOND FLOOR PLANS-ARCHITECTURAL, DRAWING NO. 60-02-66 SF 5/1868," Wilcox, Erickson, Vogelbach and Baumann, New York, 1 May, 1959, on file Selfridge Base Museum.

Original construction plans, "PLATFORM PLAN-ARCHITECTURAL, DRAWING NO. 60-02-66 SF 5/1869," Wilcox, Erickson, Vogelbach and Baumann, New York, 1 May, 1959, on file Selfridge Base Museum.

Original construction plans, "ELEVATIONS-ARCHITECTURAL, DRAWING NO. 60-02-66 SF 5/1870," Wilcox, Erickson, Vogelbach and Baumann, New York, 1 May, 1959, on file Selfridge Base Museum.

Original construction plans, "ELEVATIONS-ARCHITECTURAL, DRAWING NO. 60-02-66 SF 5/1871," Wilcox, Erickson, Vogelbach and Baumann, New York, 1 May, 1959, on file Selfridge Base Museum.

C. INTERVIEWS

Colonel Robert Stone (Ret.), Curator, Selfridge Base Museum, October 13, 1995.

Eric Reeve, Selfridge Environmental Management, October 12, 1995.

Interview, John Rynkowski, Selfridge Environmental Management (former serviceman at Selfridge during 1960s), October 27, 1995.